



US 20140342716A1

(19) **United States**(12) **Patent Application Publication**  
**HARRIS et al.**(10) **Pub. No.: US 2014/0342716 A1**(43) **Pub. Date: Nov. 20, 2014**(54) **APPLICATION BASED NETWORK  
INFORMATION MAINTENANCE****Publication Classification**(71) Applicant: **NOKIA SOLUTIONS AND  
NETWORKS OY**, Espoo (FI)(51) **Int. Cl.**  
**H04W 8/22** (2006.01)  
**H04W 4/12** (2006.01)(72) Inventors: **John HARRIS**, Glenview, IL (US);  
**Umamaheswar KAKINADA**,  
Carpentersville, IL (US); **Ronald  
CROCKER**, St. Charles, IL (US)(52) **U.S. Cl.**  
CPC . **H04W 8/22** (2013.01); **H04W 4/12** (2013.01)  
USPC ..... **455/418**; 455/466(73) Assignee: **NOKIA SOLUTIONS AND  
NETWORKS OY**, Espoo (FI)(57) **ABSTRACT**

Various communication systems may benefit from notifications of network information. For example, cellular optimization may be accomplished by selective use of a data technique by applications on network devices, which may further benefit from notifications that may reduce the need for external data requests, used in coordination with application observations of current network conditions. According to certain embodiments, a method can include monitoring network service viability for a user or application. The method can also include sending a push message to a user equipment when network service viability is detected for the user or the application. The push message can indicate at least one threshold associated with network service viability.

(21) Appl. No.: **14/054,287**(22) Filed: **Oct. 15, 2013****Related U.S. Application Data**(63) Continuation-in-part of application No. 13/897,046,  
filed on May 17, 2013.